



# SmartState™

SC Centers of Economic Excellence

**The South Carolina SmartState™ Program** is one of the most successful state challenge grant programs in the nation. The SmartState Program uses state, private, and federal funds to establish advanced research centers in South Carolina. Each Center of Economic Excellence is led by one or more SmartState Endowed Chairs—world-renowned scientists and engineers recruited to South Carolina through the program.

More than 100 companies and top organizations from all over the world have chosen to invest in the SmartState Program. Corporate and organizational investments in the research centers are matched 100% by state funds. In return, these investors receive access to world-class researchers and advanced research programs.

The SmartState Program has been a bold, forward-thinking effort to reorient South Carolina's existing industries toward high-technology sectors and to develop new industry clusters in knowledge-intensive areas.

The SmartState Program has allowed South Carolina to recruit 38 endowed chairs; these world-class scientists and engineers have patented discoveries and started companies based on their research. Some are members of prestigious organizations such as the National Academy of Sciences and the National Academy of Engineering. They have been recruited to South Carolina from institutions such as MIT and NASA, and from countries including the UK, the Netherlands, and South Africa.

**The SmartState Endowed Chairs are directing research programs with potential applications that could save and improve lives around the world**



■ At MUSC, **Drs. Robert Adams** and **Marc Chimowitz** are researching advanced stroke treatments and technology, such as stents used to treat patients with brain artery blockages and software that can help deliver faster stroke care to rural patients.



■ At MUSC's Regenerative Medicine Center, in which Clemson University and USC are partners, **Drs. Richard Swaja** and **Xuejun Wen** are researching tissue regeneration to alleviate suffering and death caused by organ failure.



■ At USC, cardiac electrophysiology specialist **Dr. Martin Morad**, a founding fellow of the International Society of Heart Research, is working on the first pacemaker derived from biological tissue.

SOUTH CAROLINA'S  
RESEARCH UNIVERSITIES



RESEARCH

INNOVATION

INVESTMENT



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## The Centers of Economic Excellence that form the core of the SmartState Program are moving technology from the lab to the marketplace

■ The **Regenerative Medicine Center** has served as a springboard for FirstString Research, a company that has developed a technology to help wounds heal faster and prevent scarring. The company has received two patents.

■ A start-up company SimTunes from the **Clinical Effectiveness and Patient Safety Center** has licensed its simulation educational technology to international firm Laerdal Medical, which will make its products available worldwide. The technology enables students and professionals in the health care field to test their medical skills on models that simulate patient ailments.

■ The **Marine Genomics Center** has sold a diagnostic gene chip to the International Oyster Microarray Consortium. Intellectual property generated by this Center has major implications on shrimp aquaculture.

■ The **Molecular Proteomics in Cardiovascular Disease and Prevention Center** has a license agreement with Ortho-Clinical Diagnostics, a subsidiary of Johnson & Johnson, based on its identification of blood enzymes used to detect probabilities of heart failure.

■ Research at the **Cancer Drug Discovery Center** has led to the filing of a disclosure for several new compounds that inhibit an enzyme over-expressed in cancer cells, PIM kinase. A new biotech company has been formed to develop these PIM kinase inhibitors for cancer treatment.

The Washington Advisory Group, a prominent Washington DC-based consulting firm, called the SmartState Program the **“best of its kind in the nation”** after completing a comprehensive evaluation of the program.

**Over \$400 million** has been invested in the South Carolina economy through the SmartState Program. In addition to the \$400 million in investments already received, **\$600 million** in additional investment has been committed to South Carolina because of the SmartState Program.

Twenty-seven major corporations and corporate foundations have invested a minimum of **\$500,000** for a total of **\$80 million**.

TO LEARN MORE, PLEASE VISIT

**[www.SmartStateSC.org](http://www.SmartStateSC.org)**

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